Fixed Wireless Terminal

CDMA 800/1900Mhz 2000 1x
Etross-8828

User's Manual

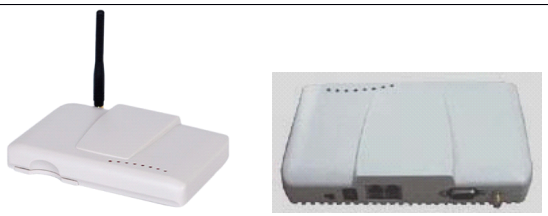
1. Product Introduction

Congratulations on purchasing of our Fixed Wireless Terminal. Before using this terminal, please kindly read this user manual carefully.

Etross-8828 is a CDMA to Analog Converter, the device can produce a FXS line to allow a regular phone to be connected and used just like a local landline(PSTN) except your calls will go out from the CDMA network. This device can both receive and make calls.

So It is widely used in home &office, public phone, rural areas, steamer, railway etc.

Appearance and Structure

Item	Etross-8828	Remark
Appearance		White color box
Material	ABS (Acrylonitrile Butadiene Styrene)	
Dimension	170mm×118mm×30mm	Excluding antenna
Weight	250g	Weight of Main unit
Power Switch	Rocker switch	
Power Socket	12V DC input	DC-470
Data port interface	9PIN (RS-232)	For Non-Ruim Only(for write IMSI&ESN)
Phone interface	RJ11	2 RJ-11 ports for extentions
Antenna interface	SMA-female	
LED display	No.1: Power, No.2-5: Signal Strength display, No.6: talking, No.7-8: In Use	From Right to left(front side view)

2. Technical Specifications

1. Air Interface: **CDMA 800/1900Mhz** IS-2000（backward IS-95A/B）

	800Mhz	1900Mhz
2. RF receiving (RX):	869 ～894MHz	1930 MHz ～ 1990 MHz
3. RF transmitting (TX):	824 ～849MHz	1850 MHz ～ 1910 MHz

4. Vocoder: 8K QCELP, EVRC

5. Support: **Ruim Support Or Non Ruim support (Optional)**
6. Industrial module: Sierra Wireless Module (Qualcomm 3G cdma)
7. Power Consumption: Static ≤25MA Emission:≤300MA
8. Dialtone frequency: 450Mhz
9. Sensitivity: -104db
10. Ac-Power: Input: 100-240V 50/60Hz ,Outupt: DC12V 1A
11. Connector of Power: US type or European type (Optional)
12. Antenna Gain: 2.5dbi (Short Plastic Antenna), 3.5dbi (Magnetic Antenna with 3m cable)
13. Antenna Connection: SMA
14. Connection Mode: RJ-11 phone jack

15.Surrounding Temperature：-10℃ ～ +40℃ Relative humidity:45% ～ 90%（Without frost）

16.Atmosphere Pressure：86 ～ 106Pka

17.Environment Noise :〈60db

18. Back up battery (Optional): Standby time: 12 hrs, talk time: 1-1.5 hrs
19. Color: White color
20. Weight: 0.50kg with Power adapter, Antenna,Manual and box.

21. Dimensions:(L×W×H) Average : 27cmX17cmX6.4cm (box size)

3. Features &Functions

1) Simple to install and easy to maintain
2) Steady module and reliable design ensures good performance
3) Provides optimized circuit directly connecting the exchange device for extensions
4) Compatible to most telephones, PBX and VoIP gateways (for call termination)
5) Strong signals with high gain antenna
6) Attractive plastic casing
7) Ruim Support or Non-Ruim support (optional)
8) Caller ID display
9) Provides reversal polarity signal (Voice detecting reverse) for metering
10) No noise and clear voice
11) Suitable for wide voltage range and low power consumption
12) RJ-11 ports (for extensions)
13) Locking PIN / network (optional)

4. Installation And Connection

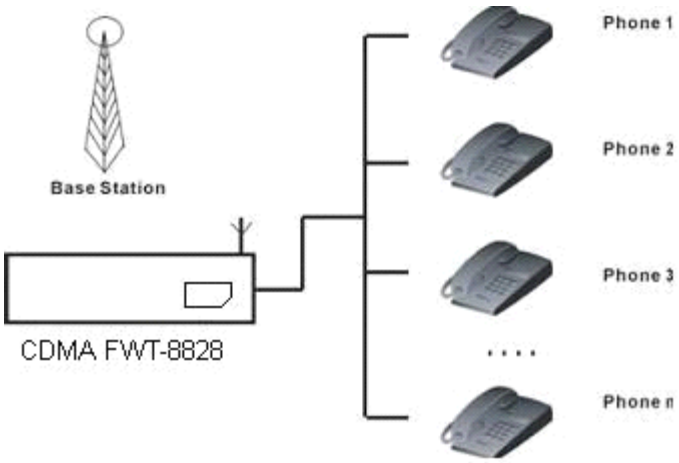
The Condition for Installation

The terminal asks for 110- 220V AV power supply. It must be installed in the area where the CDMA network can cover. The strength of the signal can affect the quality of voice.

1. Insert UIM card into the UIM card holder
2. Install antenna. In order to ensure the quality of voice, antenna must be put beyond 1.5 from the telephone and terminal.
3. On end of the telephone line connects to the “Phone” port of the terminal, the other end connects to telephone.
4. “Power” port connects to power adapter.

1) The Installation for Connecting to Ordinary Telephone

The Sketch for connecting ordinary Telephone

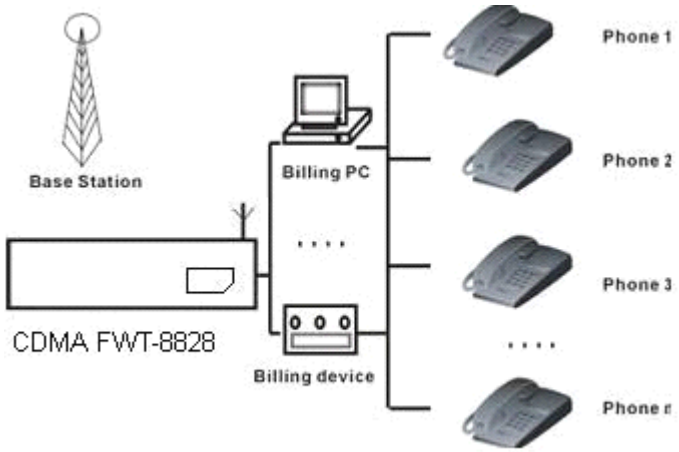


Draw your attention: Because there are many types of ordinary telephone and their electric parameters are different. In order to avoid mutual disturbance between telephone and terminal and affect voice quality. The distance between telephone and terminal is 1.5m at least.

2) The installation for connecting to billing device for metering

If the users demand to register cost during calls, billing device can be connected between terminal and ordinary telephone. Billing device register cost according to the anti-polarity signal that is provided by terminal.

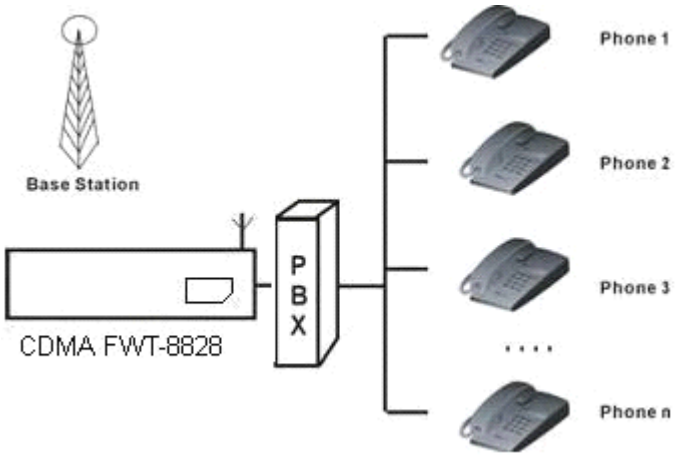
The sketch for connecting to Billing device or Computer charging system



3) The installation for connecting to PBX for call extentions

If users want to connect small PBX to this terminal, connect terminal's "Phone port" to the PBX.

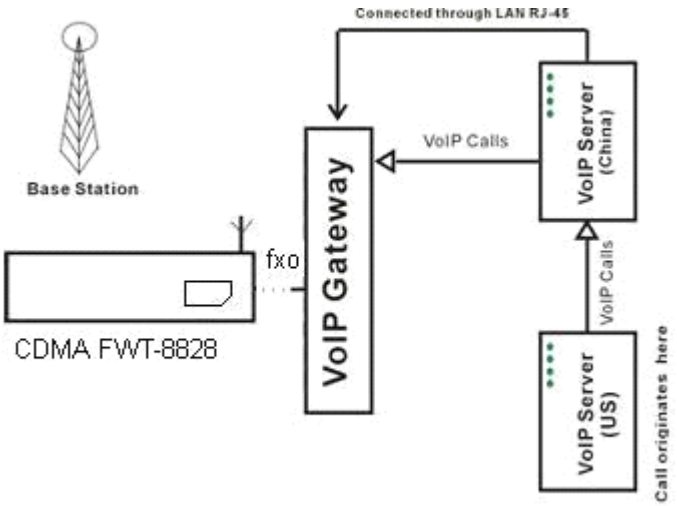
The sketch for connecting to PBX device.



4) The installation for connecting VoIP gateway for Call Termination

Suppose a VoIP call originates from US, which was transferred from US Server to China Server on VoIP, finally the call will be terminated from internet to CDMA network and to be sent out to the destination answer side.

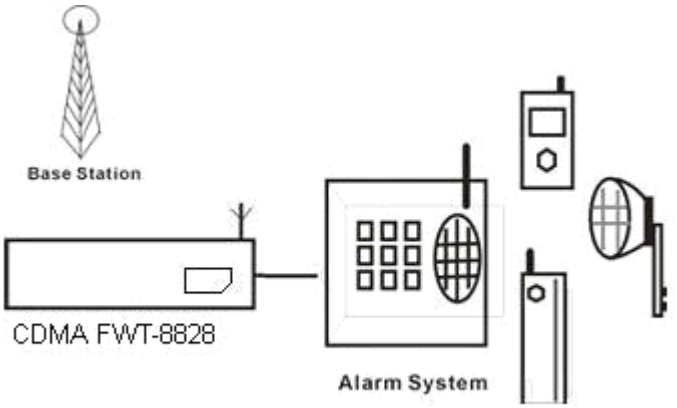
The sketch for connecting to VoIP gateway



5) The installation for connecting to alarm system for Security

The CDMA FWT can substitute the PSTN for connecting to alarm system for security purpose when PSTN failure or not available.

The sketch for connecting to alarm system



5, Function Setting:

Under standby mode:

1. Press reset button, it shows accumulated billing 1. (If press button for 2 seconds, you can clear the accumulated billing 1)
2. Press reset button for 5 seconds, it shows accumulated billing 2.
3. Billing 80 groups.

==========

*00#000# Restore settings. If it rings "du" for 1 time, it is ok; If it rings "du ..."for more times, it is wrong setting, and you hang up to end. (all the below settings are just the same)

*00#010# Ban calls close (factory default)

*00#011# Ban calls open

*00#012# Not to remove "0" for long-distance calls (factory default)

*00#013# Remove "0" for long-distance calls

*00#014# No need long ring mode after calls (factory default)

*00#015# Need long ring mode after calls

*00#016# Allow incoming calls (factory default)

*00#017# Prohibition of incoming calls

*00#018# Close number sections (factory default)

*00#019# Open number sections

*00#020# Not to show the default IP No. (factory default)

*00#021# show the default IP No.
*00#022# Close automatically lock card
*00#023# Automatically lock card
*00#024# Close the first three-minute billing
*00#025# Open the first three-minute billing
*00#026# GSM network lock
*00#027# CDMA network lock

*00#028# cancel network lock (factory default)

*00#030# lock card manually
*00#031# unlock card manually
*00#032# time modification *00#032#NNNNNN#, hour-minute-second format, 2-digit each, 24-hour system

*00#033# prohibition of out-going calls, direct calls, free calls, clear

*00#034# Clear number sections entered manually

*00#035# Clear total phone charges 2
*00#036# set recharge number *00#036#NNNNNN#

*00#040#00000# 1for prohibition of out-going calls, eg. *00#040#11111#
*00#040#00000# (factory default)

Order: local fix-line telephone, local mobile phone, long-distance fix-line telephone, long-distance mobile phone, international call

*00#051# set 1st group of IP numbers eg.:*00#051#17951# IP numbers are from 3-digit to 9-digit
*00#052# set 2nd group of IP numbers eg.:*00#052#17911#
*00#053# set 3rd group of IP numbers eg.:*00#053#19389#
*00#054# set 4th group of IP numbers eg.:*00#054#19314#
*00#055# set 5th group of IP numbers eg.:*00#055#19314#

*00#060#<number1><number2><number3><number4><number5>#
1 is to dial IP numbers additionally, 0 is not to dial IP numbers numbers range from 0 to 5

number1 local fix-line telephone dial IP number groups 1 to 5 additionally
number2 local mobile phone dial IP number groups 1 to 5 additionally
number3 long-distance fix-line telephone dial IP number groups 1 to 5 additionally
number4 long-distance mobile phone dial IP number groups 1 to 5 additionally

number5 international call dial IP number groups 1 to 5 additionally

eg.:not to dial any additionally *00#060#00000#<factory default>
eg.:all dial group 1 addtionally *00#060#11111#.
eg.: not to dial addtionaly for local fix-line telephone, but others dial group 2 *00#060#00222#

*00#070# increase No. sections eg.: increase 1380013
*00#070#380013# <it can save 550 group numbers totally>

==========

*00#100# *00#100#NNN# the rate of the first three-minute is NNN 分
*00#101# *00#101#NNN# the rate of receiving call is NNN 分
*00#102# *00#102#NNN# the rate of local call is NNN 分
*00#103# *00#103#NNN# the rate of long-distance call is NNN 分
*00#104# *00#104#NNN# the rate of call to Hongkong and Taiwan is NNN 分
*00#105# *00#105#NNN# the rate of call to USA, Canada and Hawaii
*00#106# *00#106#NNN# the rate of call to UK, and France is NNN 分<UK, France, Italy, Germany, South Korea, Japan, Australia, New Zealand, Malaysia, Thailand, India, Philipphines>
*00#107# *00#107#NNN# the rate of other countries NNN 分<other international rates>

*00#300# 10 groups ban dial whose initial digits are from 0 to 9 *00#300#~~~*00#309#
*00#400# 10 groups direct dial number s *00#400#~~~*00#409#
*00#500# 10 groups free numbers *00#500#~~~*00#509#

==========

6.Packing List

Name	Quantity	Remark
CDMA device Etross-8828	1pcs	800/1900Mhz
Ac- adapter	1pcs	DC12V/1A
Antenna	1pcs	Short Plastic Antenna or Magnetic Antenna with 3m cable
User Manual	1pcs	English

Warranty Card

Please fill in the blanks carefully, and keep it properly as the voucher for warranty.

Type of Equipment	Etross-8828 CDMA Fixed Wireless Terminal		
User's name		Contact with:	
Contact Tel.no.			
Address			
Date of Ex-works			
Date of Maintenance	Damage	Management	Maintainer
Sales Agent (Stamp)		Purchasing Date	